

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A chromatography cartridge comprising:
 - a tubular housing having a first open end, a second open end, an outer surface, and an inner surface, the tubular housing defining an interior volume;
 - a first plug including an annular groove adapted to receive the first open end of the tubular housing, a first portion of the first plug positioned within through the first open end and into the interior volume and having an outer circumferential surface, a substantial portion of the outer circumferential surface having a length greater than the thickness of the tubular housing and being fused to the inner surface of the tubular housing, and a second portion of the first plug positioned outside the interior volume and extending toward the second open end, the second portion of the first plug extending along and overlapping a portion of the outer surface of the tubular housing;
 - a first frit positioned in the interior volume, the first frit having a first surface oriented substantially parallel to a lateral surface of the first portion of the first plug, the first surface of the first frit being in contact with the lateral surface of the first portion of the first plug;
 - a first opening extending through the first plug, the first opening being in fluid communication with the interior volume, the first plug including a protruding extension through which the first opening extends; and
 - a second plug including an annular groove adapted to receive the second open end of the tubular housing, a first portion of the second plug positioned within through the second open end and into the interior volume, and having an outer circumferential surface, a substantial portion of the outer circumferential surface having a length greater than the thickness of the tubular housing and being fused to the inner surface of the tubular housing, and a second portion of the second plug positioned outside of the interior volume and extending toward the first open end, the second portion of the second plug extending along and overlapping a portion of the outer surface of the tubular housing;
 - a second opening extending through the second plug, the second opening being in fluid communication with the interior volume; and
 - a second frit positioned in the interior volume, the second frit having a first surface oriented substantially parallel to a lateral surface of the first portion of the second plug, the first surface of the second frit being in contact with the lateral surface of the first portion of the second plug.

2. (Previously presented) The chromatography cartridge set forth in claim 1, wherein the substantial portion of the outer circumferential surface of the first and second plugs is frictionally-welded to the inner surface of the tubular housing.
3. (Previously presented) The chromatography cartridge set forth in claim 1, wherein the substantial portion of the outer circumferential surface of the first and second plugs is spin-welded to the inner surface of the tubular housing.
4. (Previously presented) The chromatography cartridge set forth in claim 1, wherein one of the first plug and the second plug comprises a first portion positioned within the open end of the tubular housing and a second portion positioned to extend outwardly of the respective open end of the tubular housing.
5. (Previously presented) The chromatography cartridge set forth in claim 4, wherein the second portion of one of the first plug and second plug extends along at least a portion of an outer surface of the tubular housing to at least partially conceal the first portion of the respective plug.
6. (Original) The chromatography cartridge set forth in claim 1, wherein the cartridge is disposable.
7. (Currently amended) The chromatography cartridge set forth in claim 1, wherein the cartridge has a longitudinal axis, and further comprising a plurality of axially-directed bores ~~defined in~~ extending through an upper surface of one of the first plug and second plug to provide a coupling site between ~~for~~ a mechanical drive device ~~and the respective plug~~.
8. (Withdrawn) The chromatography cartridge set forth in claim 1, further comprising at least one radially-extending rib on an upper surface of the plug to provide coupling between a mechanical drive device and the plug.
9. (Previously presented) The chromatography cartridge set forth in claim 1, further comprising a cover positioned over one of the first plug and second plug and tubular housing to hide at least a portion of the respective plug.

10. (Previously presented) The chromatography cartridge set forth in claim 1, wherein the outer circumferential surface of one of the first plug and second plug is fused to the inner surface of the tubular housing adjacent the respective open end of the tubular housing.

11-21. (Cancel)

22. (Currently amended) A chromatography cartridge comprising
a tubular housing having an inlet, an outlet, a first open end and a second open end, a longitudinal axis and an inner surface;
a first porous disk positioned within the tubular housing adjacent the inlet;
a second porous disk positioned within the tubular housing adjacent the outlet;
at least one chromatography medium received in the tubular housing and disposed axially between the first porous disk and the second porous disk;
a first plug positioned within the first open end of the tubular housing, the first plug having a first lateral surface in contact with the first porous disk and a second surface outside of the tubular housing, the first plug and including an annular groove adapted to receive the first open end of the tubular housing, a first portion of the first plug having an outer circumferential surface, at least a portion of the outer circumferential surface having a length greater than the thickness of the tubular housing and being fused to the inner surface of the tubular housing, the first plug including the inlet, and a second portion of the first plug positioned outside of the tubular housing and extending toward the second open end, the second portion of the first plug extending along and overlapping a portion of the outer surface of the tubular housing; and
a second plug positioned within the second open end of the tubular housing, the second plug having a first lateral surface in contact with the second porous disk and a second surface outside of the tubular housing, the second plug and having an annular groove adapted to receive the second open end of the tubular housing, a first portion of the second plug having an outer circumferential surface, at least a portion of the outer circumferential surface having a length greater than the thickness of the tubular housing and being fused to the inner surface of the tubular housing, the second plug including the outlet.

23. (Previously presented) The chromatography cartridge set forth in claim 22, wherein at least a portion of the outer circumferential surface of the first and second plugs is frictionally-welded to the inner surface of the tubular housing.

24. (Previously presented) The chromatography cartridge set forth in claim 22, wherein at least a portion of the outer circumferential surface of the first and second plugs is spin-welded to the inner surface of the tubular housing.

25. (Previously presented) The chromatography cartridge set forth in claim 22, wherein the outer circumferential surface of the first and second plugs is fused to the inner surface of the tubular housing adjacent the respective open end of the tubular housing.

26. (Previously presented) The chromatography cartridge set forth in claim 22, wherein one of the first plug and second plug includes a first portion positioned within the open end of the tubular housing and a second portion positioned to extend outwardly of the respective open end.

27. (Previously presented) The chromatography cartridge set forth in claim 26, wherein the second portion of one of the first plug and second plug extends at least partially along an outer surface of the tubular housing to at least partially conceal the first portion of the respective plug.

28. (Currently amended) The chromatography cartridge set forth in claim 22, further comprising at least one axially-extending bore ~~defined in~~ extending through an upper surface of one of the first plug and second plug to provide a coupling site between ~~for~~ a mechanical drive device ~~and the respective plug~~.

29. (Withdrawn) The chromatography cartridge set forth in claim 22, further comprising at least one radially-extending rib on an upper surface of the plug to provide coupling between a mechanical drive device and the plug.

30-42. (Cancel)

43. (New) The chromatography cartridge set forth in claim 1, wherein the second portion of the first plug includes an axial length greater than an axial length of the first portion of the first plug.

44. (New) The chromatography cartridge set forth in claim 43, wherein the second portion of the second plug includes an axial length greater than an axial length of the first portion of the second plug.
45. (New) The chromatography cartridge set forth in claim 1, wherein the second portion of the first plug includes an inner circumferential surface that is fused to the outer surface of the tubular housing.
46. (New) The chromatography cartridge set forth in claim 45, wherein the second portion of the second plug includes an inner circumferential surface that is fused to the outer surface of the tubular housing.
47. (New) The chromatography cartridge set forth in claim 22, wherein the second portion of the first plug includes an axial length greater than an axial length of the first portion of the first plug.
48. (New) The chromatography cartridge set forth in claim 47, wherein the second portion of the second plug includes an axial length greater than an axial length of the first portion of the second plug.
49. (New) The chromatography cartridge set forth in claim 22, wherein the second portion of the first plug includes an inner circumferential surface that is fused to the outer surface of the tubular housing.
50. (New) The chromatography cartridge set forth in claim 49, wherein the second portion of the second plug includes an inner circumferential surface that is fused to the outer surface of the tubular housing.